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<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/714,436	ASSA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Hai C. Pham	2861	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed 07/17/06.
2. ☒ The allowed claim(s) is/are 1-19, 22-27, 30-33, 36-38 and 45-54.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                      |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|  | 9. <input type="checkbox"/> Other _____.   |

### **REASONS FOR ALLOWANCE**

1. The following is an examiner's statement of reasons for allowance: claims 1 and 33 are patentable over the prior art of record because of the specific method for printing for printing a code or alphanumeric code on a product moving in a direction, the code being constructed from a plurality of pixels in a first data set indicating positions of the pixels, the method comprising generating a corrected data set indicating positions that the pixels would occupy if each pixel was moved at a velocity of the product until the pixel was printed, and printing the code according to the corrected data set by continuously directing a printing beam to a plurality of locations on a material of the product as defined by the corrected data set, without de-activating the printing beam, to alter an optical characteristic of the material at the locations, a dwell time at each location being longer than a dwell time on areas of the material traveled by the printing beam between consecutive locations, wherein the locations on the material having the altered optical characteristic form the code on the product. The combined limitations as currently claimed are not taught by the prior art of record considered alone or in combination.

Claims 10 and 36 are patentable over the prior art of record because of the specific printing system, which comprises a laser that produces a printing beam for printing a code or alphanumeric code on a product moving in a direction, the code being constructed from a plurality of pixels in a first data set indicating positions of the pixels, electronics that generate a corrected data set indicating positions that the pixels would occupy if each pixel was moved at a velocity of the product until the pixel was printed,

and electronics that print the code according to the corrected data set by causing the printing beam to be continuously directed to a plurality of locations on a material of the product as defined by the corrected data set, without de-activating the printing beam, to alter an optical characteristic of the material at the locations, a dwell time at each location being longer than a dwell time on areas of the material traveled by the printing beam between consecutive locations, wherein the locations on the material having the altered optical characteristic form the code on the product. The combined limitations are not taught by the prior art of record considered alone or in combination.

Claim 19 is patentable over the prior art of record because of the specific method for printing on a product, the method comprising providing a printing system for printing a code on the product which is adjacent to the printing system and which is moving in a direction relative to the printing system, the code constructed from a plurality of pixels, and prioritizing an order in which the pixels are printed such that the pixels are printed in a direction which is opposite to the direction which the product moves, wherein an aperture limits an area within which the printing system is able to print and the product moves past the aperture, and wherein the pixels are prioritized such that pixels which would cross in front of the aperture earlier are given a higher priority than pixels which would cross in front of the aperture later if the pixels were already printed on the product as the product moves past the aperture. The combined limitations as currently claimed are not taught by the prior art of record considered alone or in combination.

Claim 27 is patentable over the prior art of record because of the specific printing system, comprising a laser that produces a printing beam for printing a code on a

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product, which is adjacent to the printing system and moving in a direction relative to the printing system, the code being constructed from a plurality of pixels, and electronics that prioritize an order in which the pixels are printed such that the pixels are printed in a direction which is opposite to the direction which the product moves wherein an aperture limits an area of the product on which the laser is able to print as the product moves past the printing system, and wherein the pixels are prioritized such that pixels which would cross in front of the aperture earlier are given a higher priority than pixels which would cross in front of the aperture later if the pixels were present on the product before being printed by the printing system. The combined limitations as currently claimed are not taught by the prior art of record considered alone or in combination.

Claim 45 is patentable over the prior art of record because of the specific printing system comprising a laser that produces a printing beam, an optics assembly, and electronics operable to control the laser and the optics assembly to continuously direct the printing beam to a plurality of locations on a material of a product, without deactivating the printing beam, to alter an optical characteristic of the material at the locations, a dwell time at each location being longer than a dwell time on areas of the material traveled by the printing beam between consecutive locations, wherein the printing beam remains incident on the material, and the plurality of locations on the material having the altered optical characteristic form at least a portion of at least one symbol forming a code on the product, wherein the electronics are configured to accept input that governs time spent by the printing beam dwelling at the locations to alter the

optical characteristic. The combined limitations as currently claimed are not taught by the prior art of record considered alone or in combination.

Claim 50 is patentable over the prior art of record because of the specific method of printing comprising generating a laser beam, directing the laser beam to a plurality of locations on a material of a product without de-activating the laser beam, and adjusting a dwell time of the laser beam on the material during said directing such that an optical characteristic of the material is altered to form spots at the locations and the optical characteristic of the material is not altered in areas of beam incidence between the spots, wherein the spots are arranged to form at least a portion of at least one symbol on the product; wherein said adjusting is based on user input dwell time information corresponding to the material. The combined limitations as currently claimed are not taught by the prior art of record considered alone or in combination.

Claims 2-9, 11-18, 22-26, 30-32, 37-38, 46-49 and 51-54 are allowed because they are directly or indirectly dependent from claims 1, 10, 19, 27, 33, 36, 45 and 50 above.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai C. Pham whose telephone number is (571) 272-2260. The examiner can normally be reached on M-F 8:30AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vip Patel can be reached on (571) 272-2458. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



HAI PHAM  
PRIMARY EXAMINER

September 29, 3006